

Deputy Director for Operations

**BROOKHAVEN**  
NATIONAL LABORATORY

SEP 18 2006

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managed by Brookhaven Science Associates  
for the U.S. Department of Energy  
www.bnl.gov

Mr. Michael D. Holland  
Brookhaven Site Manager  
U. S. Department of Energy  
Brookhaven Area Office  
Upton, NY 11973

Dear Mr. Holland:

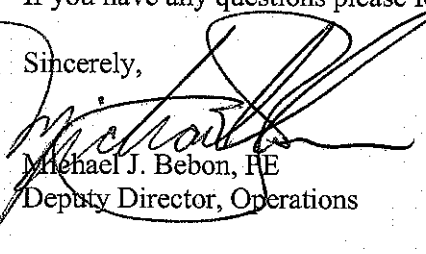
**Subject: Inventory of Unneeded Materials and Chemicals at Brookhaven  
National Lab**

In response to the DOE memo titled "Strategy for the Management of Unneeded Materials and Chemicals" dated December 22, 2005, enclosed is a report on the Inventory of Unneeded Materials and Chemicals (UMC) at Brookhaven National Laboratory.

This inventory is large and complex and will create significant challenges to meet the DOE goal of complete inventory reduction by 2011. One such challenge is the identification of a secure funding path to address each UMC. Historically, disposition of UMCs, which includes the securing of funds, are championed by the responsible directorate or division and are limited by competition for funds for higher priority needs. Competition for funds is typically risk-based, and since most UMCs are stored safely and pose no risk to the public, employees, or environment, the priority of these projects is typically low. This trend is expected to continue, making the 2011 disposition date a very difficult challenge.

If you have any questions please feel free to contact John Selva at extension 8611.

Sincerely,



Michael J. Bebon, PE  
Deputy Director, Operations

MB/JS: car

cc: G. Goode  
R. Lee  
J. Selva  
J. Tarpinian

File: DH00ER.06  
CCTS: CC2006-2965

**BROOKHAVEN NATIONAL LABORATORY**  
**INVENTORY**  
**OF**  
**UNNEEDED MATERIALS AND CHEMICALS (UMC)**

**SEPTEMBER 2006**

Prepared by  
**BROOKHAVEN NATIONAL LABORATORY**  
P.O. Box 5000 Brookhaven, NY 11973  
Managed by  
Brookhaven Science Associates for the  
U.S. Department of Energy  
under contract DE-AC02-98CH10886

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## 1.0 Introduction

On February 10, 2006, Brookhaven National Laboratory (BNL) was directed by the Brookhaven Site Office to implement the Department of Energy (DOE) Strategy for the Management of Unneeded Materials and Chemicals (UMC) outlined in the December 22, 2005 memorandum from D. Garman, Undersecretary for Energy, Science and Environment (Appendix A). The strategy requires that sites with a UMC inventory aggregate value of greater than \$50,000 develop a site-specific plan for the management and disposition of UMCs, develop an inventory of UMC's existing on September 30, 2006 and report annually on UMC disposition activity in November.

The UMC Plan was submitted on June 12, 2006. This report contains the UMC inventory (Section 3.0) existing at BNL as of September 2006. The following table is a summary of the inventory and cost of disposition.

### UMC Inventory Summary

	Number of Entries	Cost of Disposition
Equipment	107	\$19,250,700
Chemicals	7	\$297,000
Total	114	\$19,547,700

The disposition cost is spread over five years as follows and is dependent upon successful funding.

### UMC Annual Cost Summary

Disposition Schedule	Cost of Disposition
2007	\$763,000
2008	\$3,424,700
2009	\$3,775,000
2010	\$3,838,000
2011	\$7,747,000

The Cost of Disposition value of \$19,547,700 is a reduction from the \$44,000,000 value reported in the FY2008-2012 CPR funding request submitted in May 2006. This reduction is attributed to a more focused review of UMC's that was unable to be performed prior to the May submission and a reinterpretation of the definition of a UMC.

This inventory is large and complex and will create significant challenges to meet the DOE goal of complete inventory reduction by 2011. One such challenge is the identification of a secure funding path to address each UMC. Historically, disposition of UMCs, which includes the securing of funds, are championed by the responsible directorate or division and are limited by competition for funds for higher priority needs. Competition for funds is typically risk-based, and since most UMCs are stored safely and pose no risk to the public, employees, or environment, the priority of these projects is

typically low. This trend is expected to continue, making the 2011 disposition date a very difficult challenge.

The success of the UMC program will be measured annually with the first progress report due on November 15, 2006.

## **2.0 UMC Inventory**

In response to a 1999 DOE audit report on the management of UMCs, BNL developed an inventory of UMCs and other legacy items and began a dispositioning program as budget allowed. In response to the 2005 Strategy, BNL renewed its focus on UMCs and completed the inventory in Section 3.0.

BNL's approach to developing and maintaining the UMC inventory is a team approach consisting of a project manager and Directorate/Division personnel. The inventory is a culmination of Directorate/Division specific UMC inventories generated by reviewing a 1999 UMC/legacy list, current property management and chemical management inventories and through program evaluations and walk downs.

The following is a description of the inventory categories.

### **Disposition Schedule**

The year that the UMC is expected to be dispositioned. The date of disposition is highly dependent upon the successful allocation of funding and is therefore subject to change.

### **Department**

The directorate or department responsible for dispositioning the UMC.

### **UMC Description**

General description of the unneeded material or chemical.

### **Building**

The physical location of the UMC.

### **Disposition Cost**

The estimated cost to disposition the UMC.

### **Funding Mechanism**

The method that BNL expects to use to fund the disposition. ADS refers to a tracking system used during the BNL project ranking and funding process.

### **Management System Utilization**

Refers to the GSA, DOE or other program being used to assist in the UMC disposition.

### **Disposition Date Closed**

Refers to the date that the UMC was fully dispositioned

### **Method of Closure**

Refers to the ultimate disposal method of the UMC such as reused, recycled or disposed.

### **Progress Description**

A description of the activity associated with the UMC.

Several key UMC successes and planned activities were discussed in BNL's Site Specific Plan submitted to DOE in June 2006. The inventory identified in Section 3 replaces any planned activities previously noted. The inventory provides a snapshot of the DOE defined UMC inventory existing as of September 2006.

BNL currently maintains a list of future decontamination and decommissioning (D&D) projects. Future D&D projects were not included in the UMC inventory. In addition, BNL limited its UMC inventory to items that were reasonably accessible for disposition. Certain fixed structures that are not reasonably accessible for disposition were considered building infrastructure and will be addressed with future decommissioning projects.

### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
2007	AD	AGS Cable (Rad) 2007	911	\$40,000	Operating Funds	None		NA	
2007	AD	AGS Concrete Shield Block (Clean) 2007	911	\$40,000	Operating Funds	None		NA	
2007	AD	AGS Concrete Shield Block (Rad) 2007	911	\$135,000	HEP Funding	None		NA	
2007	AD	AGS IPM Datacon Controls Crates (3)	911	\$1,000	Operating Funds	None		NA	
2007	AD	Beam Separator Spare Parts	0919B	\$2,000	Operating Funds	None		NA	
2007	AD	Datacon Control Cards (50)	911	\$1,000	Operating Funds	None		NA	
2007	AD	E15 IPM Flag Datacon Control Crate	911	\$1,000	Operating Funds	None		NA	
2007	AD	Excess Magnets, Collimators, Beam Tubes (2007)	911	\$100,000	HEP Funding	None		NA	
2007	AD	Fork Lift House	911	\$10,000	Operating Funds	None		NA	
2007	AD	H10 Datacon Controls Crate	911	\$1,000	Operating Funds	None		NA	
2007	AD	H2O Septum Datacon Controls Crate	911	\$1,000	Operating Funds	None		NA	
2007	AD	L20 Septum Flag Datacon Control Crate	911	\$1,000	Operating Funds	None		NA	
2007	AD	Leak Detector	911	\$3,000	Operating Funds	None		NA	
2007	AD	Old Coil Copper	911	\$4,000	Operating Funds	None		NA	
2007	AD	Old Trailers (10)	911	\$5,000	Operating Funds	None		NA	
2007	AD	Old Tube Equipment	911	\$4,500	Operating Funds	None		NA	
2007	AD	Power Supplies (2) Old H-10 Building	911	\$2,000	Operating Funds	None		NA	
2007	AD	Pressurized Cylinders (Various Contents)*	911	\$70,000	Operating Funds	None		NA	

\* - Chemical



### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
2007	AD	SEB Crates (10)	911	\$1,000	Operating Funds	None		NA	
2007	AD	SEB Modules (40)	911	\$1,000	Operating Funds	None		NA	
2007	AD	Siemens Capacitors	928	\$10,000	HEP Funding	None		NA	
2007	BO	Trailer and Supplies	463	\$2,000	Contributed Resource	None		NA	
2007	EE	Clean Plastic Tanks	490	\$5,000	TBD Write ADS	None		NA	
2007	EE	Misc Rad and Mixed Wastes	830	\$10,000	TBD Write ADS	None		NA	
2007	EE	Ocean Buoy (2' dia by 30' long) - Outdoors	209	\$1,000	Department	None		NA	
2007	EE	Out-of-Service Overhead Crane	526	\$500	Department	None		NA	
2007	EE	Scrap Vessels/Equip/Cabinet	526	\$500	Department	None		NA	
2007	EE	Source Shipping Casks	830	\$100,000	TBD Write ADS	None		NA	
2007	ES	FRAC Tank	860	\$100,000	Internal Funds	DOE ME	9/7/2006	Disposed	
2007	ES	Tank Truck (7000 Gallons)	860	\$100,000	Internal Funds	DOE ME	9/7/2006	NA	Entered on DOE Material Exchange on March 6, 2006.
2007	NE	Misc Lab Equipment (Granite tables, pumps, etc)	815	\$500	Department Funds	None		NA	
2007	PO	120 Cubic Yards of Various Small Equipment	510	\$10,000	Department Funding with PPM Support	Other (Describe)		NA	
2008	AD	AGS Cable (Rad) 2008	911	\$40,000	Operating Funds	None		NA	
2008	AD	AGS Shield Block (Clean) 2008	911	\$40,000	Operating Funds	None		NA	
2008	AD	CT4	911	\$22,000	Operating Funds	None		NA	

\* - Chemical

### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
2008	AD	Emergency Generators (2) in 912A	0912A	\$20,000	Operating Funds	None		NA	
2008	AD	Misc Equipment in 924 Yard	924	\$10,000	Operating Funds	None		NA	
2008	AD	Old H-10 House	911	\$12,000	Operating Funds	None		NA	
2008	AD	Portable Houses (2) West Side TB	911	\$40,000	Operating Funds	None		NA	
2008	AD	Power Supplies (2) RF Group	918	\$5,000	Operating Funds	None		NA	
2008	AD	Pressurized Cylinder (Tetrafluoromethane) *	911	\$10,000	Operating Funds	None		NA	
2008	AD	PTR PS Houses	911	\$10,000	Operating Funds	None		NA	
2008	AD	Splitter HV Controls Crates (3)	911	\$1,000	Operating Funds	None		NA	
2008	AD	Splitter HV Tanks (3)	911	\$1,000	Operating Funds	None		NA	
2008	AD	Splitter Motion Datacon Controls Crates (3)	911	\$1,000	Operating Funds	None		NA	
2008	AD	Zeller Lead Glass	911	\$5,000	Operating Funds	None		NA	
2008	EE	Contents of Canals and Hot Cells	830	\$200,000	TBD ADS - AA4D0008	None		NA	
2008	EE	Miscellaneous Equipment Tools	830	\$3,200	Department/PPM	None		NA	
2008	ES	Sealed Sources 2008	860	\$1,000,000 or as budget allows	TBD ADS - AA4D0046	None		NA	
2008	ES	Sitewide Nuclear Material 2008	860	\$2,000,000 or as budget allows	TBD ADS - AA4D0046	None		NA	
2008	IO	150 Liter Liquid Nitrogen Dewers (2)	535	\$500	Department Funded	None		NA	
2008	IO	Camtek Automated Optical Inspection	535	\$500	Department Funded	None		NA	

\* - Chemical

### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
		Machine							
2008	IO	Chiller	535	\$500	Department Funded	None		NA	
2008	IO	Circuit Cleaner	535	\$500	Department Funded	None		NA	
2008	IO	Diffusion Pump	535	\$500	Department Funded	None		NA	
2008	IO	Manifold	535	\$500	Department Funded	None		NA	
2008	IO	Mechanical Pump	535	\$500	Department Funded	None		NA	
2008	IO	Museum Pieces (3)	535	\$500	Department Funded	None		NA	
2008	IO	Vacuum System	535	\$500	Department Funded	None		NA	
2009	AD	AGS Cable (Clean - 150,000 lbs)	911	\$20,000	Operating Funds	None		NA	
2009	AD	AGS Cable (Rad) 2009	911	\$40,000	Operating Funds	None		NA	
2009	AD	AGS Concrete Shield Block (Rad) 2009	911	\$135,000	HEP Funding	None		NA	
2009	AD	AGS Shield Block (Clean) 2009	911	\$40,000	Operating Funds	None		NA	
2009	AD	AGS Steel (Clean)	911	\$75,000	Operating Funds	None		NA	
2009	AD	AGS Steel (Rad) 2009	911	\$54,000	HEP Funding	None		NA	
2009	AD	D6 Experimental Equipment and Trailers	911	\$80,000	Operating and HEP Funds	None		NA	
2009	AD	Excess Magnets, Collimators, Beam Tubes (2009)	911	\$100,000	HEP Funding	None		NA	
2009	AD	Plan B Refrigerator	911	\$20,000	Operating Funds	None		NA	
2009	DA	Metallurgy Evaluation	801	\$100,000	TBD ADS -	None		NA	

\* - Chemical

### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
		Labs, Contents of			AA4D0036				
2009	DH	703 Basement Cleanout	703	\$10,000	TBD Write ADS	None		NA	Remove debris in SIGMA pile area
2009	DH	Sigma Pile	703	\$10,000	TBD Write ADS	None		NA	
2009	ES	Fiberglass Tank (Old Neut Cell Tank)	801	\$1,000	TBD Write ADS	None		NA	
2009	ES	Halon 1211 Portable Fire Extinguishers*	599	\$20,000	TBD Write ADS	DOE ME		NA	
2009	ES	Sealed Sources 2009	860	\$1,000,000 or as budget allows	TBD ADS - AA4D0046	None		NA	
2009	ES	Sitewide Nuclear Material 2009	860	\$2,000,000 or as budget allows	TBD ADS - AA4D0046	None		NA	
2009	PR	Suspect Scrap Metal Pile	210	\$70,000	TBD ADS - AA4D0038	None		NA	
2010	AD	AGS Cable (Rad) 2010	911	\$40,000	Operating Funds	None		NA	
2010	AD	AGS Shield Block (Clean) 2010	911	\$40,000	Operating Funds	None		NA	
2010	AD	AGS Steel (Rad) 2010	911	\$54,000	HEP Funding	None		NA	
2010	AD	Evaporator Coolers (2) Rad	928	\$100,000	HEP and Operating Funds	None		NA	
2010	AD	Pressurized Cylinder (Ethane)*	911	\$10,000	Operating Funds	None		NA	
2010	AD	Vacuum Trucks (791 and Smith)	911	\$80,000	Operating Funds	None		NA	
2010	DH	Hydrogen Tank (outdoors)	209	\$10,000	TBD Write ADS	None		NA	
2010	EE	Vacuum Pressure Chamber	815	\$4,000	TBD Write ADS	None		NA	
2010	ES	Sealed Sources 2010	860	\$1,000,000	TBD ADS -	None		NA	

\* - Chemical

### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
				or as budget allows	AA4D0046				
2010	ES	Sitewide Nuclear Material 2010	860	\$2,000,000 or as budget allows	TBD ADS - AA4D0046	None		NA	
2010	MO	Contents of Abandoned Hot Cells	801	\$300,000	TBD ADS - AA1D0103	EADS		NA	
2010	MO	Legacy supplies, materials, chemicals, RMW	490	\$200,000	TBD Write ADS	None		NA	
2011	AD	AGS Concrete Shield Block (Rad) 2011	911	\$135,000	HEP Funding	None		NA	
2011	AD	AGS Shield Block (Clean) 2011	911	\$40,000	Operating Funds	None		NA	
2011	AD	AGS Steel (Rad) 2011	911	\$54,000	HEP Funding	None		NA	
2011	AD	Drott Travelift	911	\$100,000	Operating Funds	None		NA	
2011	AD	Excess Magnets, Collimators, Beam Tubes (2010)	911	\$100,000	HEP Funding	None		NA	
2011	AD	MultiParticle Spec	911	\$250,000	Operating Funds	None		NA	
2011	AD	Old Rad Hot Beam Pipes (15)	911	\$10,000	Operating Funds	None		NA	
2011	DC	Gallium Trichloride & Tank*	555	\$50,000	TBD Write ADS	None		NA	
2011	DC	Legacy Materials (901-Imaging Areas)	901	\$1,000,000	TBD Write ADS	None		NA	
2011	EE	Oceanographic Equipment	490	\$20,000	TBD Write ADS	None		NA	
2011	EE	Toepler Pump	815	\$10,000	TBD Write ADS	None		NA	
2011	ES	Lead/Brick sheet, pigs, misc. 50,000kg	860	\$100,000	TBD ADS - AA4D0046	None		NA	
2011	ES	Sealed Sources 2011	860	\$2,000,000	TBD ADS - AA4D0046	None		NA	

\* - Chemical

### Section 3 - Inventory of Unneeded Materials and Chemicals – Brookhaven National Laboratory, September 2006

Disposition Schedule	Department	UMC Description	Building	Disposition Cost	Funding Mechanism	Management System Utilization	Disposition Date Closed	Method of Closure	Progress Description
2011	ES	Sitewide Nuclear Material (2,000 tons) 2011	860	\$2,000,000	TBD ADS - AA4D0046	None		NA	
2011	MO	30 RWCF's at WMD*	801	\$12,000	TBD Write ADS	None		NA	
2011	MO	Crane	801	\$1,000	TBD Write ADS	None		NA	
2011	NE	Contents of Dynamitron/Cyclotron	901	\$200,000	TBD ADS - AA4D0012	None		NA	
2011	NE	Lab Chemicals Misc (815/830/526/901)*	815	\$125,000	TBD Write ADS	None		NA	
2011	RP	Depleted Uranium/metal 278 kg	865	\$500,000	TBD ADS - AA4D0046	None		NA	
2011	RP	Deuterium / Heavy Water 762.6 kg D20	865	\$100,000	TBD ADS - AA4D0046	None		NA	
2011	RP	Highly Enriched Uranium / Other Forms 114 gm	865/830	\$50,000	TBD ADS - AA4D0046	None		NA	
2011	RP	Low Enriched Uranium/N/A 11.70 kg (JANUS)	865	\$100,000	TBD ADS - AA4D0046	Other (Describe)	9/7/2006	Disposed	
2011	RP	Normal Enriched Uranium / N/A (287.4 kg)	865	\$25,000	TBD ADS - AAD0046	None		NA	
2011	RP	Plutonium (125 grams)	865	\$500,000	TBD ADS - AA4D0046	None		NA	
2011	RP	Strategic Lithium (6Li)/Lif (1.34 kg)	865	\$25,000	TBD ADS - AA4D0046	None		NA	
2011	SC	Hot Shop Cleanout	462	\$240,000	TBD ADS - AA4D0009	EADS		Reused	
<b>Total</b>				<b>\$19,547,700</b>					

\* - Chemical

## **Appendix A**




Department of Energy  
Washington, DC 20585

DEC 22 2005

MEMORANDUM FOR DISTRIBUTION

FROM:

DAVID K. GARMAN   
UNDER SECRETARY FOR ENERGY, SCIENCE, AND  
ENVIRONMENT (ESE)

LINTON F. BROOKS   
ADMINISTRATOR  
NATIONAL NUCLEAR SECURITY ADMINISTRATION

SUBJECT: Strategy for the Management of Unneeded Materials and  
Chemicals

**In September 1999, the Inspector General issued an Audit Report CR-B-99-02 entitled, "Management of Unneeded Materials and Chemicals (UMCs)," citing the Department for not aggressively pursuing the disposition or reuse of UMCs and stated that the Department needed to strengthen its management of these items. The 1996 inventory identified that there were at least 900,000 tons of such materials and chemicals within the complex. The Offices of the Under Secretary for ESE and NNSA are contributors to this inventory of UMCs.**

Each organization is directed to implement the Strategy described in the attachment which includes the requirement for budgeting and funding the disposition of UMCs and for the development of Site-specific Plans, which are due June 30, 2006. In addition, ESE Programs and NNSA will report their progress of managing and dispositioning the inventories of UMCs to our respective offices on an annual basis as described in the attachment. The first report is due November 15, 2006. Since many sites have taken actions to reduce their inventories of UMCs, this initial report should include highlights of their actions to date and specific actions, as described in the attachment, that they are taking to address their current inventories of UMCs. This report should also identify any challenges in the disposition of UMCs and the proposed actions needed locally or corporately to eliminate these challenges. Sites with no UMCs will provide a one-time report to their respective PSO or NNSA describing their management approach to eliminating the creation of UMCs. Reports from sites with no UMCs are due no later than June 30, 2006.

Finally, a Senior Program Official shall be named by each ESE program organization and NNSA to be responsible for the management of UMCs and coordination of activities among ESE and NNSA organizations. A Materials Disposition Advocate shall be assigned at each Program Secretarial Office, Headquarters Program Office, NNSA, and Field element that has UMCs. The Materials Disposition Advocate will be responsible for coordinating the development of the Site-specific Plans and ensuring that the Plans are being executed. On an



as needed basis, the Advocates will also coordinate with the Office of Procurement and Assistance Management for ESE and the Associate Administrator for Infrastructure and

Environment for NNSA, to facilitate reuse, recycling, sales, and disposal of UMCs. Please provide your consolidated list of Materials Disposition Advocates for ESE to John Hubbard at (202) 586-4009 ([John.Hubbard@hq.doe.gov](mailto:John.Hubbard@hq.doe.gov)) and for NNSA, to Alice Williams (202) 586-7349 ([Alice.Williams@nnsa.doe.gov](mailto:Alice.Williams@nnsa.doe.gov)) by January 20, 2006.

Attachment

Distribution:

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**Energy, Science, Environment (ESE)  
And  
National Nuclear Security Administration (NNSA)  
Strategic Approach for the Management and Disposition of Unneeded  
Materials and Chemicals (UMCs)**

The following is the overall Strategy to ensure ESE and NNSA organizations incorporate into their management programs those means necessary to effectively and efficiently manage inventories of UMCs. Each Program Secretarial Office (EE, EM, NE, RW, and SC) and NNSA shall:

1. Be responsible for overall management of its materials and chemical inventories consistent with this Strategy and requirements found in 41 CFR Parts 101 and 109. This includes accountability for budgeting and funding the costs associated with material and chemical acquisitions, storage, maintenance, surveillance, and ultimate disposal or disposition.
2. Ensure the use of best practices (e.g., reuse, recycle, and sales) for timely disposition of materials and chemical inventories no longer needed to support mission needs consistent with applicable property, environmental, health and safety protection requirements, policies and DOE Orders including those related to the release of scrap metals and the conduct of operational assessments to identify opportunities for material/chemical segregation and substitution, recycle/reuse, or other pollution prevention practices pursuant to DOE Order 450.1 (*Environmental Protection Program*). The goal is the disposition of the current inventory of UMCs by the end of Fiscal Year 2011. Materials and chemicals remain unused or undesignated for use after DOE or NNSA project completion (i.e. end of funding) or close out without a written mission-related justification by the cognizant DOE or NNSA Program or Site Manager the materials or chemicals are deemed unneeded. Management of Equipment Held for Future Projects is subject to requirements found in 41 CFR 109-28.50. Such equipment is not considered unneeded.
3. Manage inventories of materials and chemicals using best practices to avoid new acquisition of materials and chemicals beyond their mission needs. This includes integration of the components of this Strategy into existing management systems such as the Integrated Safety Management Systems/Environmental Management Systems (including pollution prevention practices pursuant to DOE O 450.1, and implementing a centralized procurement and distribution program for purchasing, tracking, distributing, and managing materials with toxic or hazardous content).
4. Develop a plan for the management and disposition of UMCs with an aggregate value of \$50,000 or more. Where there are multiple programs at a site (e.g., EM,

SC, FE), a single site plan shall be developed and coordinated through the lead program responsible for the site. The Plans shall be submitted to the Headquarters Program Secretarial Office (PSO) or NNSA program responsible for the site as soon as possible but no later than June 30, 2006, and shall address the elements contained in Appendix A (*Site-specific Plan Requirements for the Management and Disposition of Unneeded Materials and Chemicals (UMCs)*). Plans shall be updated, as appropriate, on an annual basis and provided to the PSO or NNSA program.

5. Conduct, on an annual basis, an assessment of the management of UMCs and, if plans are required, the implementation of the plans. The assessment should evaluate program implementation, identify gaps, assess impacts of UMCs on site operations to include cost impacts, and provide recommendations for improvements.
6. If UMCs have an aggregate value of \$50,000 or more, implement, on an annual basis, appropriate FY Contract performance measure(s) to prevent accumulation of additional UMCs inventory.
7. Report annually the accomplishments and progress in meeting this strategy and site-specific plans, as appropriate, to S-3 or NA-1, with the first report due November 15, 2006. Where there are multiple programs at a site (e.g., EM, SC, FE, and/or NA), a single site report shall be developed for the site. The report shall be submitted to the PSO or NNSA program responsible for the site. Since many sites have taken actions to reduce their inventories of UMCs, this initial report should include highlights of their actions to date as well as address specific actions they are taking to address their current inventories of UMCs.
  - a. For those sites required to have a plan, the report will include the following:
    - Annual update on the inventory of UMCs (amount and types of materials);
    - Types and amounts of UMCs dispositioned in the previous fiscal years (FY). **Note:** The first report covers the period of FY 2000-2005, if data are available;
    - Description of program accomplishments;
    - Description of materials reused within the site or transferred to/from other DOE or Federal agencies and identification of systems used to help in disposition of these UMCs (e.g., site wide systems: Office of Procurement and Assistance Management *Energy Asset Disposal System (EADS)*; the General Services Administration *GSAccess* (formerly known as the Federal Disposal System-FEDS); and the Department of Energy, Office of Science, *Materials Exchange Network*;
    - Results of annual DOE assessment related to implementation of the Strategy and Site UMCs Disposition Plans;

- An explanation of any variances against the annual UMCs disposition plan and performance metrics;
  - Identification of any impediments and challenges to disposition and proposed actions to eliminate or overcome such impediments and challenges; and
  - Statement by DOE Official on UMCs being stored, including justification/explanation for maintaining these UMCs on site.
- b. For those sites not required to have a Plan, their report will include a description of their management approach to addressing the UMCs issue and accomplishments in disposition of their UMCs.
8. Coordinate with the Office of Procurement and Assistance Management or the Office of Acquisition and Supply Management, which are available on a policy and advisory basis for DOE and NNSA, respectively, when regarding proposed transfers and sales of UMCs.
9. As appropriate, prior to any new acquisitions of materials and chemicals, organizations should determine whether these materials are available, and if it is cost effective to obtain them from within DOE, NNSA, or from other Federal agencies. The utilization of existing management systems, to the extent practicable, will be used to identify opportunities for reutilization, recycle, sales, and disposal of UMCs within DOE, NNSA, and other Federal agencies. These systems include the Office of Procurement and Assistance Management Energy Asset Disposal System (EADS), the General Services Administration GSAXcess, and the Department of Energy, Office of Science, Materials Exchange Network.
10. Support the completion of DOE's and NNSA's policy review efforts for scrap metals originating from radiological areas. EM has the lead for this effort, but a need for support and resources from NNSA and other affected programs is anticipated.

**Site-specific Plan Requirements  
For the  
Management and Disposition of Unneeded Materials and Chemicals (UMCs)**

The following describes the activities and information to be addressed in the Site-specific Plans or existing Management Systems for UMCs<sup>1</sup> valued at greater than \$50,000.

The Plans, or a "description" of existing policies, requirements, management systems, etc. that address UMCs, shall be submitted to the applicable Headquarters Program Secretarial Office (PSO) or NNSA program responsible for the site as soon as possible but no later than June 30, 2006, and shall address the elements listed below.

The Plans or "description" shall address the following:

1. Approach to ensuring Compliance with DOE Property Management Regulations 41 CFR Parts 101 and 109;
2. Development and maintenance of an inventory of UMCs. Inventories will be in place no later than September 30, 2006. **Note:** a separate inventory of UMCs is not necessary if UMCs can be identified as part of the overall inventory;
3. Development of a site-specific schedule for the disposition of the current inventory of UMCs based on the complexity and size of the inventory. This schedule shall reflect intermediate goals as well as the overall goal of the Department for dispositioning all UMCs currently in inventory by the end of FY 2011. Where appropriate, sites shall identify and request funds for the disposition of these materials;
4. Annual assessment and evaluation of unutilized materials and chemicals against program budget and activities for the upcoming budget year to identify UMCs; and
5. Utilization of existing management systems, to the extent practicable, to identify opportunities for reutilization, recycle, sales, and disposal of UMCs within DOE and other federal agencies. These systems include the Office of Procurement and Assistance Management *Energy Asset Disposal System (EADS)*, the General Services Administration *Federal Disposal System (FEDS)*, and the Department of Energy, Office of Science, *Materials Exchange*.

Schedule Summary:

December 2, 2005	Provide POC to John Hubbard (ESE) or Alice William (NNSA): for Senior Program Official, Headquarters and Field Materials Disposition Advocates
June 30, 2006	Site-specific Plans to PSO/NNSA and Site Reports for sites without UMCs.
September 30, 2006	Inventories of UMCs in place and being maintained
November 15, 2006 and Annually thereafter	Progress Reports to S-3 or NA-1
September 30, 2011	Complete removal of all UMCs in inventory reported in 2006.

<sup>1</sup> **Unneeded Materials and Chemicals (UMCs):** Materials and chemicals are deemed unneeded if, on DOE project completion they do not have a designated future use. If they remain unused or undesignated for use after DOE project completion (i.e. end of funding) or close out without a written mission-related justification by the cognizant DOE or NNSA Program or Site Manager the materials or chemicals are deemed unneeded. Management of Equipment Held for Future Projects is subject to requirements found in 41 CFR 109-28.50. Such equipment is not considered unneeded. Materials (with or without residual radioactivity) include items such as scrap metal, lead, equipment, non-nuclear weapons components (excludes classified components), and other non-nuclear materials. Chemicals include chemical elements as well as a large array of compounds such as acids, bases, catalysts, and explosives. Examples include mercury, chlorine, sodium, laboratory chemicals, as well as janitorial supplies and other cleaning compounds. **Note:** Materials and chemicals already designated as waste are subject to existing DOE and NNSA Orders and Federal requirements and therefore are not considered to be UMCs.